ROTISZINT® Cocktails *NEXT GENERATION*

INFORMATION ON APPLICATIONS

The ROTISZINT® scintillation cocktails *NEXT GENERATION* are modern, versatile, ready-to-use scintillation cocktails for liquid scintillation (LSC) of β-emitters. (z.B. ^3H, ^{14}C, ^{32}P, ^{35}S).
The ROTISZINT® scintillation cocktails can be used for scintillation of aqueous samples in the entire biological, biochemical and chemical field. Typical applications are, for instance, measurement of cell culture supernatants, routine analysis, enzymatic or flow-count assays in the field of research, development or analytics.

Broad *excitation area* from 190 to 370 nm
Emission maximum: 420-430 nm

- High counting efficiency
- Low quenching
- Flame retardant
- NPE-free
- Biodegradable
- Non carcinogenic
- According to 2003/53/ECC

All new ROTISZINT® Cocktails are **biodegradable**.

The composition of the ROTISZINT® Cocktails is modern and **does not contain any NPE** (nonylphenylethoxylates, subject to REACH). The cocktails therefore comply with the requirements of Directive 2003/53/ECC of the European Parliament and Council.
NPE has been replaced by a combination of several reagents specifically adapted to the respective use. A single scintillation solution that covers all applications equally, like ROTISZINT®Eco plus (0016), cannot be implemented without NPEs.

The ROTISZINT® Cocktails *NEXT GENERATION* contain the same reagents as primary and secondary scintillators that were used in ROTISZINT®Eco plus.

Hence, neither the excitation nor the detection wavelength changes in any way for existing protocols.
We also recommend using the same scintillation protocol in the first approaches with one of the ROTISZINT® Cocktails *NEXT GENERATION* that was previously used with cocktail 0016. In many cases, the parameters are directly transferable. If the scintillation results are not satisfactory at first, the sample amount (the ratio sample / cocktail) can be rebalanced.

For advisory support, please contact your personal sales representative or our product management on (phone) ++49 721 5606 522.

ROTISZINT®Routine (1P1A)   non-expensive and reliable, for standard assays

Scintillation cocktail for all *standard scintillations* with aqueous samples and 'normal' mixing ratios.
The *sample uptake capacity* for some sample solutions (such as 0.3 M HNO_3) is up to 5 ml / 10 ml cocktail. For most common as well as for higher concentrated solutions (for example 0.1 M ammonium citrate, 0.1 M EDTA or 2 M HNO_3) the sample uptake volume is 2 to 3.5 ml / 10 ml cocktail.

ROTISZINT®HighCapacity (1P1C)   for scintillations in a broad range, also perfectly suited for difficult assays

Advanced scintillation cocktail for *high sample volumes*, e.g. when the aqueous sample has a low concentration or needs to be diluted. Also excellent for all standard assays.
The *sample uptake capacity* is up to 10 ml / 10 ml cocktail for many common sample solutions such as 0.5 M HNO_3, 1 M H_3PO_4, 0.1 M NaOH, 0.1 M NaCl, PBS and water. Only for some special and highly concentrated solutions (such as 0.1 M ammonium citrate, 0.1 M EDTA, 4 M H_3PO_4 or 4 M HNO_3) the sample uptake volume is 4 to 6 ml / 10 ml cocktail.

ROTISZINT®Filter (1P18)   for measuring dry and wet filter plates

Special scintillation cocktail for measuring samples in *filter plates*.
ROTISZINT®Filter can be used with practically all types of filters as well as with dry, moist or wet filter plates, the wetting of the filters by the scintillation cocktail is fast and complete.

ROTISZINT®FlowCount (1P19)   for Flow Count Assays

For *flow-through* scintillation counting. Formulated using alcohol ethoxylates that do not contain any NPE. Works perfectly with common eluents used in flow counting, including gradients, also aqueous/organic gradients, e.g. water/methanol or water/acetonitrile gradients up to a ratio of 2:1. ROTISZINT®FlowCount does not form gels and is therefore quick and easy to mix.